

Figure 1

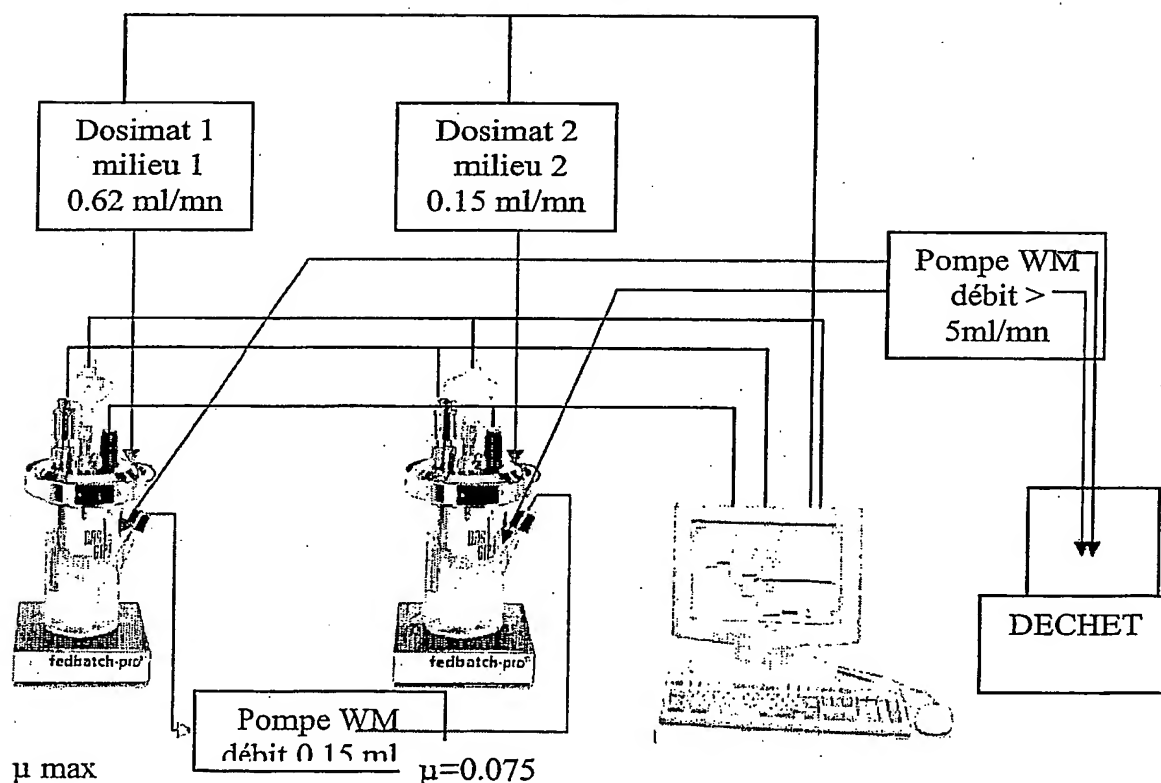


Figure 3

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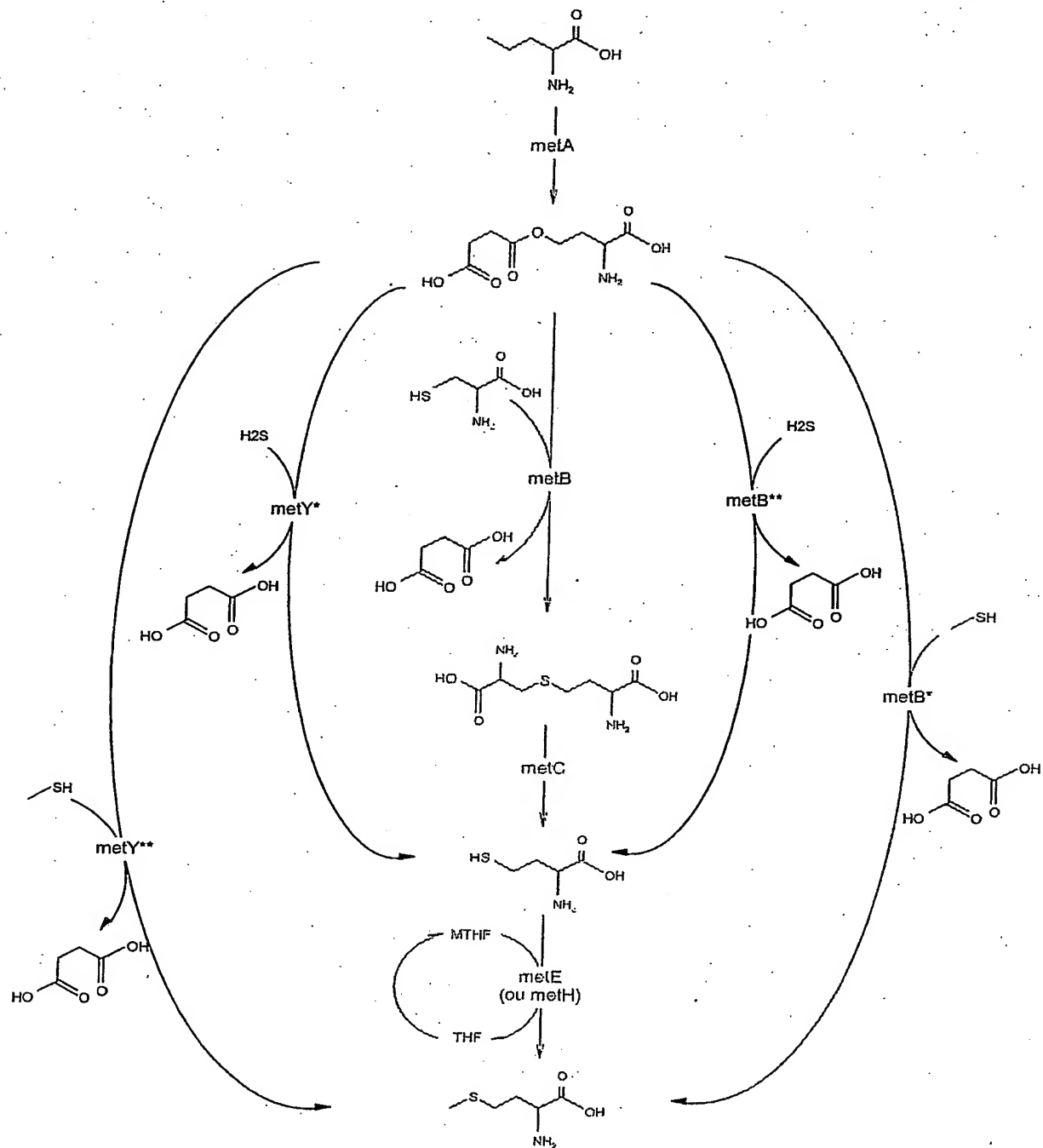


Figure 2

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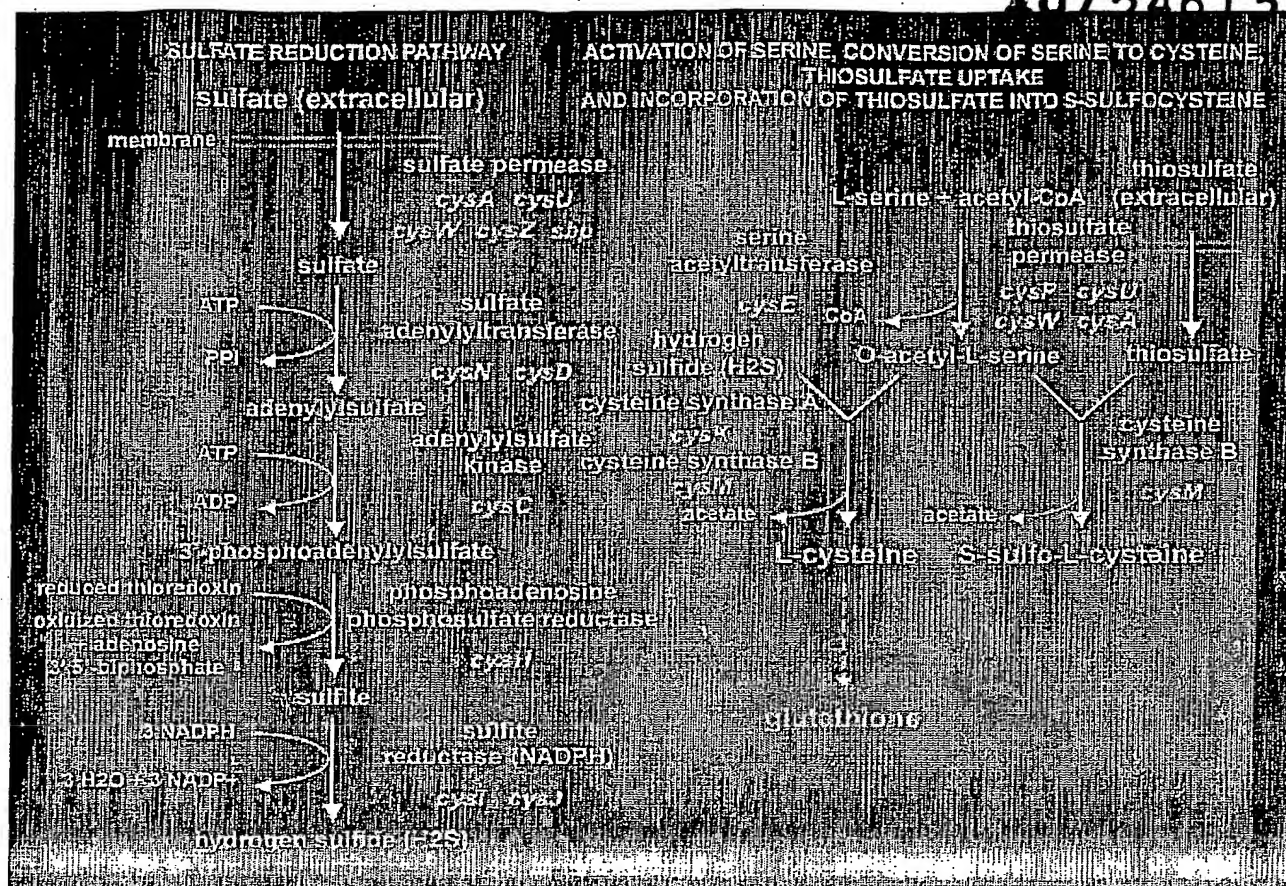


Figure 4

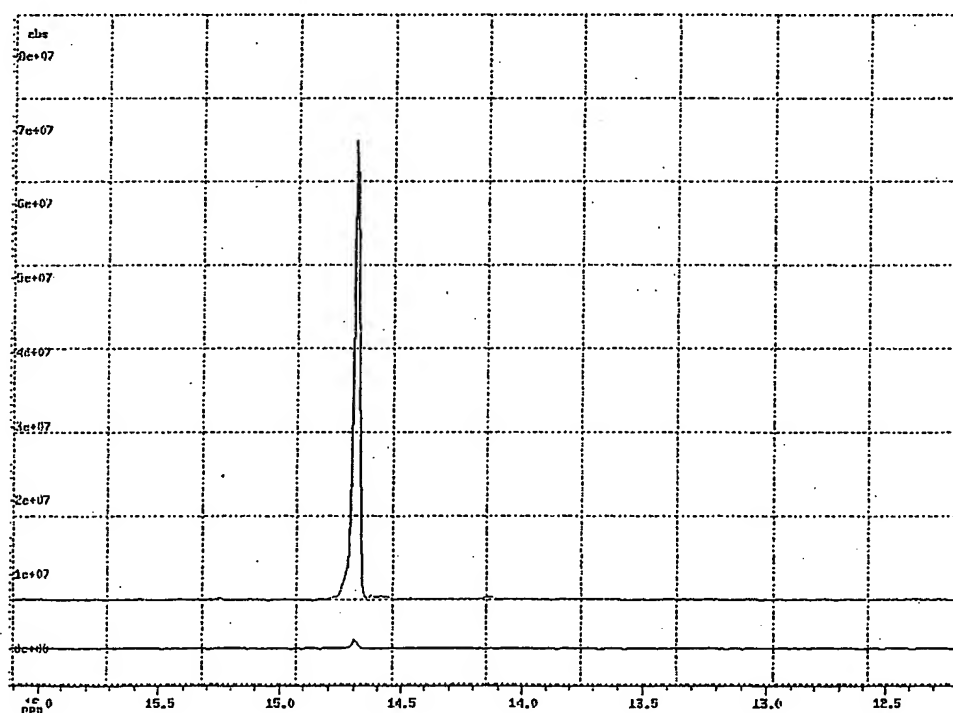


Figure 6

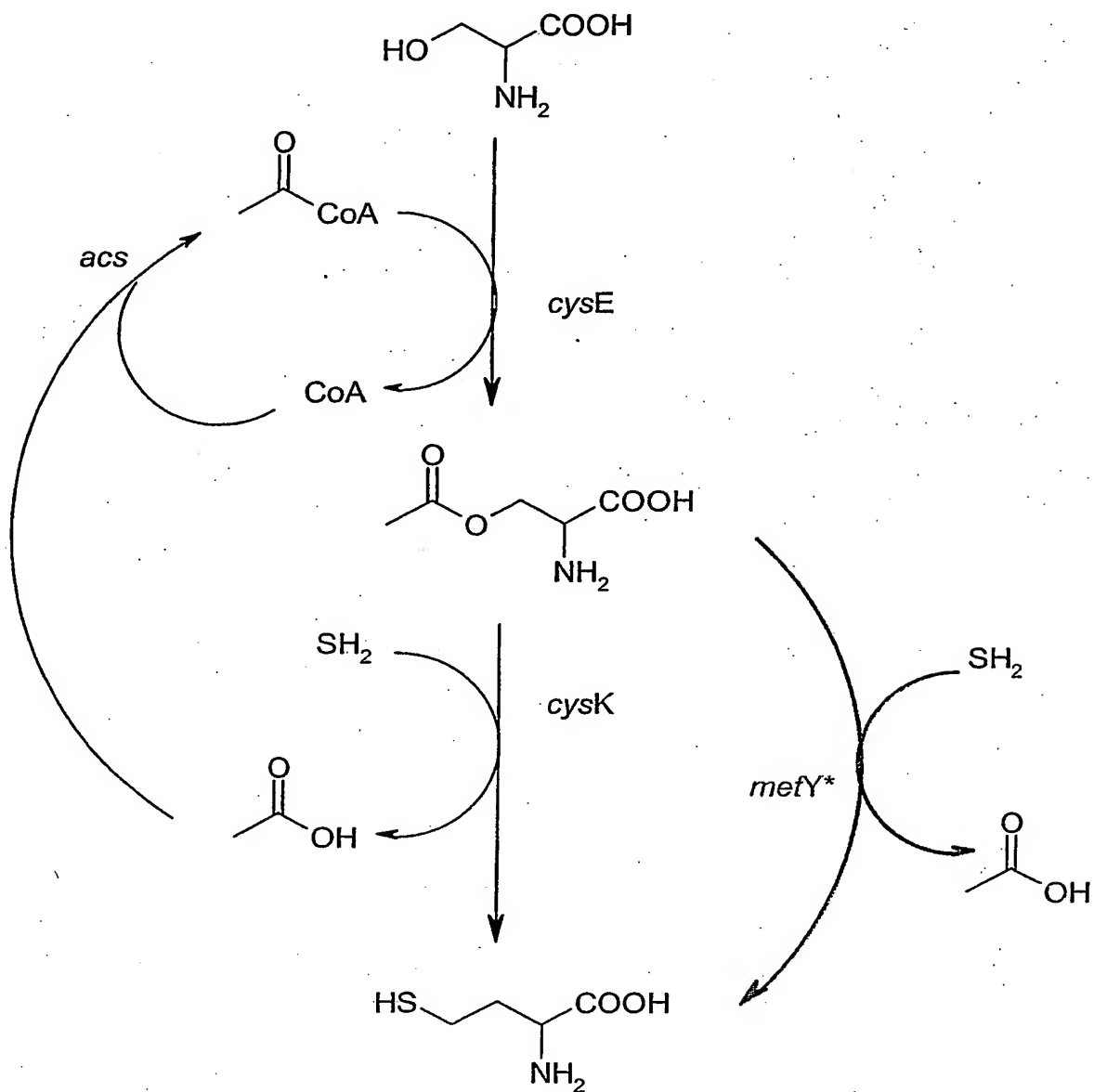


Figure 5

7

MLPFTPTIAS RCVDIRSRA PADVCSNIEV VNLVLMSDP EARAELPLCP SISAVINPQD GFPPAKQIWQ HSGDGYSSRR AEFCHGLFKD GLLRPPTELR

[illegible]

## Figure 7

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Q92MM7	ELIADLEG--	GVKGFASF	LAGI----	HAV	F-SILQSGD	VLLGDVYG	NPLFNKLV	KNGLSCTII-	-----	DTSDLS	QIKKAIKPT	-KALYLETFS
NP_373671	SVIAALEN--	GKHGFASF	VAAL----	SAV	V-MLLDKGD	ILNSDVYG	TVRALAKVET	RFGLEVDV-	-----	DTHTD	SIVQAIRPTT	-KMLFLETFS
P46807	ASLATEE--	GVFARAFSS	MAAS----	DCA	LRVMLRPGD	VIIPDVYG	TFRLIDKFT	QMNVDYTPV-	-----	PLSDLD	AVRAAITSRT	-RLIWIETPT
CAD30944	ENLAALLEG--	GRRGLAFSS	LAAE----	DCL	LRLTLRPGD	WIIPNDAYG	TFRLFAKAT	RWGVEWSVA-	-----	DTSDAA	AVRAALTPKT	-KAVWETFS
NP_696324	EQAAVEG--	GKAGLSFSS	LAAI----	DVL	LRSTIKPGD	ILLGNDVYG	TFRLSKVVF	PWGVLGVV-	-----	NITDAR	AVETALASKH	YQYVWETFS
AAO29646	EAALAELEG--	GAGVITSTG	MAAI----	HLV	LHALLRPGD	LVPHDAYG	SWRLFNALQ	KGFELITV-	-----	DLTDR	SLVEALALPP	-KVLVIETFS
NP_638204	DALAKLEK--	GATGVVTCG	MAAI----	TLV	T-TLLGPD	LVPHDAYG	SWRLFNALQ	KGFELITV-	-----	DOTDQ	SLADALAQSP	-KVLVIETFS
NP_719586	RAALAELEG--	GAGAVLTNG	MSAI----	HLV	TVFLKPGD	LVPHDAYG	SWRLFNALQ	KGFELITV-	-----	QDQDEQ	ALQAALAQSP	-KMWIETFS
NP_418374	RAALAELEG--	GAGAVLTNG	MSAI----	HLV	TVFLKPGD	LVPHDAYG	SWRLFNALQ	KGFELITV-	-----	QDQDEQ	ALQAALAEKP	-KVLVETFS
NP_457953	SALAELEG--	GKGAFTNG	MSAI----	HLV	TVFLKPGD	LVPHDAYG	SWRLFNALQ	KGFELITV-	-----	QDQDEQ	ALQAALAEKP	-KVLVETFS
BAC61028	SALAELEG--	GKGAFTNG	MSAI----	HLV	TVFLKPGD	LVPHDAYG	SWRLFNALQ	KGFELITV-	-----	QDQDEQ	ALQAALAEKP	-KVLVETFS
NP_126586	DKLAELEG--	SDNALAFNS	MSAI----	STL	YFSLLEGDK	VLSMEGYG	TYRLFNTRN	KGFELITV-	-----	QDQDEQ	ALQAALAEKP	-KVLVETFS
NP_343729	KKIVELEN--	AEMGIAFSS	MAAI----	STT	ALALLKPGS	VIVHDMFG	SYRFTDYK	NWVNVV-A-	-----	AVPSAD	SLIETIDEET	-KVLVETFS
NP_539021	DRLAVYEG--	AESAALFSS	MSAI----	ATT	LFAFVRPGD	ILHSQPLYG	TEILLAKTF	NWVNVV-A-	-----	AVPSAD	SLIETIDEET	-KVLVETFS
NP_358970	EVLAAIES--	ADYALATSS	MAAI----	QV	F-TLFNSGD	ILVSDLYG	SYRFTDYK	NWVNVV-A-	-----	AVPSAD	SLIETIDEET	-KVLVETFS
NP_786043	RVLAEHEH--	GIAAVALTSS	MAAI----	QV	F-TLFNSGD	ILVSDLYG	SYRFTDYK	NWVNVV-A-	-----	AVPSAD	SLIETIDEET	-KVLVETFS
NP_601979:	AAMGTLDG--	G-FAVSYSS	LAAA----	TSI	A-DLVPTGT	VLPKAAVY	VTNIPARME	RGLKVRV-	-----	DADNTE	EVIAAAQGA	-DVMWESIA
EAA30199	SNVIRGIANR	EEDIVLPCG	MNAIFAHRA	LYSTRTPGS	TPKSVNFG	PYVDITKILE	KFNPSGALFY	CHGSKDLDD	-----	CHGSKDLDD	EVIAAAQGA	-DVMWESIA
Consensus	..la.l#g	g..a..f.sg	m.Ai	...	..ll.pgd.	.....d.eg	.....rlf.....	.....d.....	.....al.....	.....k.....	.....Etps	
Q92MM7	NPLKITDLA	QCAVAKENH	L-----	LTI	VDNFTATPYC	QNPLLGTDI	VAHNGTKYL	GHSVDVAGV	T--TNNEALA	QEFDFQNAI	GGVGLQDSW	
NP_373671	NPLLRVTDIK	KSAREIAKEH	L-----	ISV	VDNFTATPY	QNPLDLGDI	VHSAATKYL	GHSVDVAGV	A--TSDDKLA	ERLAFINST	GGVGLQDSW	
P46807	NPLLSIADIT	SIGELGKHS	V-----	KVL	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	V--TNDEEL	QAFGLQNGA	GAVPSPFDAY	
CAD30944	NPLLGITDIA	QVAQVARDAG	A-----	RLV	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--VGDQELG	EELAFHQNA	GAVPSPFDAY	
NP_696324	NPLINITDIA	ATTEVAHKY	T-----	KVA	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	V--VNDDEET	ERLAFHQNA	GAVPSPFDAY	
AAO29646	NPLLRITDLG	AVIEAHRVG	A-----	LTV	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--ARDAELH	QQLVWMANAL	GLTGSPPFDAY	
NP_638204	NPLLRITDLR	FVIEAHRVG	A-----	LTV	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--ARDAELH	QQLVWMANAL	GLTGSPPFDAY	
NP_719586	NPLLRVVDIE	AIKASHGVG	A-----	LTV	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--ARDAELH	QQLVWMANAL	GLTGSPPFDAY	
NP_418374	NPLLRVVDIA	KICHLAREVG	A-----	VSU	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY	
NP_457953	NPLLRVVDIA	KICHLAREVG	A-----	VSU	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY	
BAC61028	NPLLRVVDIA	AVCEKAKQV	A-----	LVA	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY	
NP_126586	NPLTKVIDVP	EVAKCREVG	A-----	ILV	VDNFTATPY	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY	
NP_343729	NPLLRVIDVA	ELSKVAKEG	S-----	ILI	VDATFSTIN	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY	
NP_539021	NPLNRVIDVA	AVRVAEKTE	ARQGSRPVIA	CDNLTLLGSPV	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY		
NP_358970	NPLNRVIDVA	ELSKVAKEG	S-----	ILI	VDATFSTIN	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY	
NP_786043	NPLNRVIDVA	ELSKVAKEG	S-----	ILI	VDATFSTIN	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY	
NP_601979:	NPLNRVIDVA	ELSKVAKEG	S-----	ILI	VDATFSTIN	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY	
EAA30199	NPLNRVIDVA	ELSKVAKEG	S-----	ILI	VDATFSTIN	QNPMLGADV	VHSTTKYL	GHSVDVAGV	I--AKDPQIG	ETLHWSNTL	GLTGSPPFDAY	
Consensus	NPL....Di.	.....a....g	a	..v	VDatf.tb..	q.PL.lGad.	V.hs.tky..	Ghsdv..g.v	.....l.....n.....	.....g.....	.....pfd..	

Figure 7 (Suite)



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NP_785969	MTTNPENY HFETLQVHAG QTVD-ETGAR AVPIYQTSY VFKAQQAAG RFALTDAGNI YTRLNPTD VVDRVAAL	100
NP_712243	MPRNY KPETLALHGG QSPDSTLSR AVPIYQTSY VFKAQQAAG RFALTDAGNI YTRLNPTD VVDRVAAL	
AA068137	M KLETLAIHAG FSPDPTKAV AVPIYQTSY VFKAQQAAG RFALTDAGNI YTRLNPTD VVDRVAAL	
NP_599886:	MP KYDINSNADOW GFETRSIHAG QSVDAQTSAR NLIPIYQTSY VFKAQQAAG RFALTDAGNI YTRLNPTD VVDRVAAL	
BAC46370	MDISRPVFFV TVFDETMSSE VPMKSPATY RPEPLRHSG TLRS-QFGET SEALFTQGY VNSAECEA RFKEDLGPV YSRYSNPTIS MFERMIELE	
AA057279	MTQEWDA GRDLSDEGV GFDTLAVRAG QRRT-PEGEH GPMFTTSSY VFRTAADAAR RFAGEVPGNV YSRVTNPTVR SFEERIAALE	
AA083435:	MTQDMDA GRDLSDEGA AFDTLAVRAG QRRT-PEGEH GPMFTTSSY VFRTAADAAR RFAGEVPGNV YSRVTNPTVR SFEERIAALE	
NP_284520:	MSKKL HPQFLAIRGG KEQT-EYREH NQALFTSSS MWDNAQHAAD LFSKKIKGFT YRTANPTTA APERIAALE	
Consensus	..... #tla.hag q.....e.....p.%t.s# vf..a.haa. rF.....Gni Ysr..NPT.. #.Riaale	
NP_785969	101	
NP_712243	HGTAGVTIAT GSAATTAAIL NIAQOQDEIV AANTLYGCTY DLSVTLKKL GITHFVD-P DEPAFETAI NDHTKALYVE SIGNPGINLV DFEAIGKIAH	200
AA068137	GGVAAALATAS GOAETLAIL NIVEAQOEIV ASSLYGCTY NLLHYTFPKL GIKVHFVD-P SDPENFRKAV NDKTRAFYAE TLGNPKLNTLV NLEATKVAH	
NP_599886:	GGVGAALAVAS GMAALTYAIQ TVAEAGDNIV SVAKLYGCTY NLLHYTFPKL GIKVHFVD-P SDPENFRKAV NDKTRAFYAE TLGNPKLNTLV NLEATKVAH	
BAC46370	GGVHAFVAFSS GOAATNAIL NLAGAGDHIV TSPRLYGCTE TLFLLTLNRL GIDVSFEMP DDESQAAV QPNTKAFGE TPANQADVL DIPVAEVAH	
AA057279	GAEARSAAT GMAVTTAIL APLKTGCHV ASRALFSCSL YVIOQLLPY GIETTLVD-G LLDQWQORAL RPNTKAFGE SPINPILDLV DIPVAEVAH	
AA083435:	GAEQAVATAT GMAATLAVM SLCSAGDHVL VSRVFGSTI SLFDKVKRF GIEVDV-P-L AELSGWNAI KANTKMLFVE SPSPNLAELV DIAALAEIAH	
NP_284520:	GAEQAVATAS GMSAILALVM SLCSAGDHVL VSRVFGSTI SLFDKVKRF GIEVDV-P-L AELSGWNAI KANTKMLFVE SPSPNLAELV DIAALAEIAH	
Consensus	GAEARVATST GMSAIQAAFF TFLQAGDHV SRSLSFGCTV GFINNIVTF GIEVSHVS-P TDINEMRAAV KANTKMLFLE TPSPNPLGEVA DLEALAEIAH	
	gae.ava.at GmaA.t.all ....ag#hiv .st.l%g.t. .l....l.r. GI.v.v.v.p. #....w.aa. .nTk.f%#E sp.NP..# #i.a.ae.AH	
NP_785969	201	
NP_712243	DGLIIFIVDN TFGPYLVRP LEHGADVVH SATKFIGGHG TTMGSVIVEG GQDM---RA SG-KYPDFTT PDPQNGLVF ADLGA-----AFTTK	300
AA068137	DSEVPLIDN TLSPYLVRP IEHGADVVH SLTKFLGSHG TSIGGIIVDS GFENW---G NG-KFKNTE PDPQNGLVF ADLGA-----AFTTK	
NP_599886:	RGVPLIVDN TVATPVLCP FEHGADVVH SLTKYIGSHG TSIGGIIVDS GFENW---G NG-KFKNTE PDPQNGLVF ADLGA-----AFTTK	
BAC46370	RNSVPLIDN TIATAALVRP LELGADVVH SATKFIGGHG TTMGSVIVEG GQDM---RA SG-KYPDFTT PDPQNGLVF ADLGA-----AFTTK	
AA057279	KGGARLVVDN VFATPIWQSP LALGADVVH SATKHIDQG RCLGIIILSS E-----AFVAK	
AA083435:	AKGAMLVVDN CFCTPALQOP LILGADVVH SATKHIDQG RCLGIIILSS E-----AFVAK	
NP_284520:	AKGAMLVVDN CFCTPALQOP LILGADVVH SATKHIDQG RCLGIIILSS E-----AFVAK	
Consensus	..ga.l!!DN ...tp.l...p l.hgAD!vH SatK.idghG r..GG!....s g.....af....	
NP_785969	301	
NP_712243	VRAETLRDTG ATISPFNSFL LQGLSLSL RVERHVTNR KIVAFKAKHP KVAVINYPEL EDSYHDLAT KYFNGV-GS IFTLGLTGE AAGKALIEHL	400
AA068137	AKVQGLRDMG ASISPFNAWQ ILQGVETLPL RMRKHSNAL AVAEYLTKHP KVSWNYPGL KMDKNYSIAK KYHKDLGCA ILGFGIKGGA VEAKKFDGL	
NP_599886:	CRVQPLRNTG AALSPFNAL ILQGLSLSL RVERHVTNR KIVAFKAKHP KVAVINYPEL EDSYHDLAT KYFNGV-GS IFTLGLTGE AAGKALIEHL	
BAC46370	VRVGLRDTG STLSAFNAW AVQGIITLSL RLEHVNENAI KVAEFLNHE KVEKNFAGL KDSWYATKE KLGLYK-GS VLTFEIKGK DEAWAFIDAL	
AA057279	HLHNFRTQG PSISPFNAW LKGLSLSL RVRACDTAA SVAEVLGHP KISRLIYGR ADHPQAAVVK KQMRG--ST LVGFVKGGK AAFRVLNEL	
AA083435:	-VVGFLRTAG PTLSPFNAL FLKGLSLSL RVRACDTAA SVAEVLGHP KISRLIYGR ADHPQAAVVK KQMRG--ST LVGFVKGGK AAFRVLNEL	
NP_284520:	-VVGFLRTAG PTLSPFNAL FLKGLSLSL RVRACDTAA SVAEVLGHP KISRLIYGR ADHPQAAVVK KQMRG--ST LVGFVKGGK AAFRVLNEL	
Consensus	..v..lr.tg ...SpFNaw. .l.Gl#tL.l Rme.h..na. kvae.L..hp kl.v.%gl .dbpq..la. kq..gg.g. ....fevkgg. aaa.fi#1	

Figure 8



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NP\_785969 401 QLFSLANVA DAKSLIHHPA STTHAQNEQ 467 ELLAAGVTPD LIRISVGVEN ADDLIADLDQ ALAQV  
NP\_712243 ELFSLLANVG DAKSLVIHPA STTHQQLTPE EQLSAGVTPD FVRLSVGLEN IEDLFDLEE ALKKV  
AAN68137 QLVVRLVNIQ DAKSLACHPA STTHRQLMDD ELEKAGVPRD MVRLSIGIEH SDDIIADLAQ ALEASRG  
NP\_599886: KLHSLNANIG DVRSLVVHPA TTTHSQSDEA GLARAGVTQS TVRLSVGIET IDDIADLEG GFAAI  
BAC46370 KLAKISNNIG DAKSLVTHPA TTTHQRLKPE DRAALGISEG FIFRSAGLEH ADDIEDLTA ALEKA  
AAO57279 RLISITANIG DTKTTTTHPS TTSHGRAPQ EREAGIRDS LIRVAVGLED VADLQADLAR GLAAL  
AAA83435: RMVSITNIG DTKTTIAHPA TTSHGRSPQ DRARAGIGDS LIRVAVGLED LDDLKADMAR GLAAL  
NP\_284520. ELFSRTANIG DVRSITTHPW TTTHGRMQPE EKLAANIRPG LVRLSVGLEY VGLIDDLKQ ALAR  
Consensus .L.s..anlg Daksl...Hpa ttth.rl.pe e..aag!... .lrsvGLE. .dliadL.. ala.....

Figure 8 (fin)

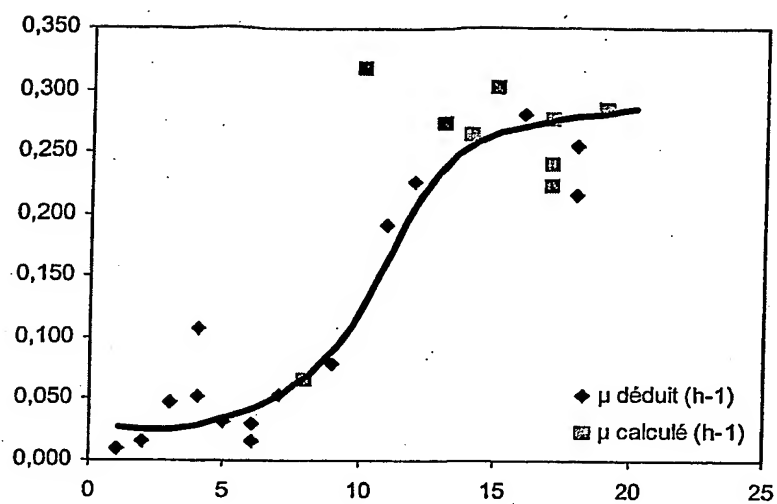


Figure 9

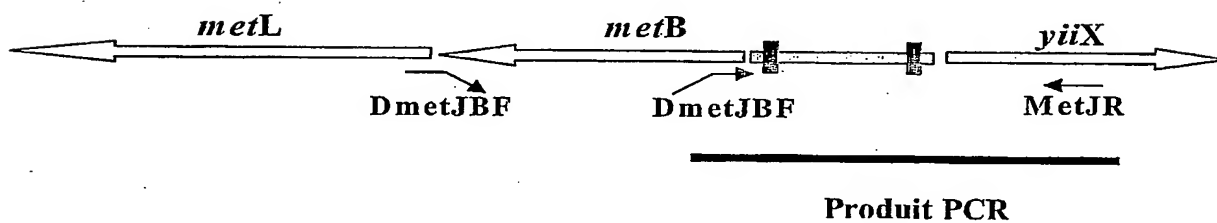


Figure 11

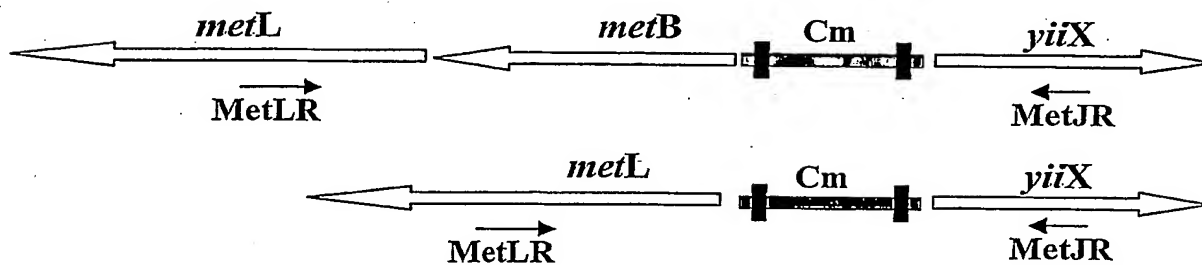
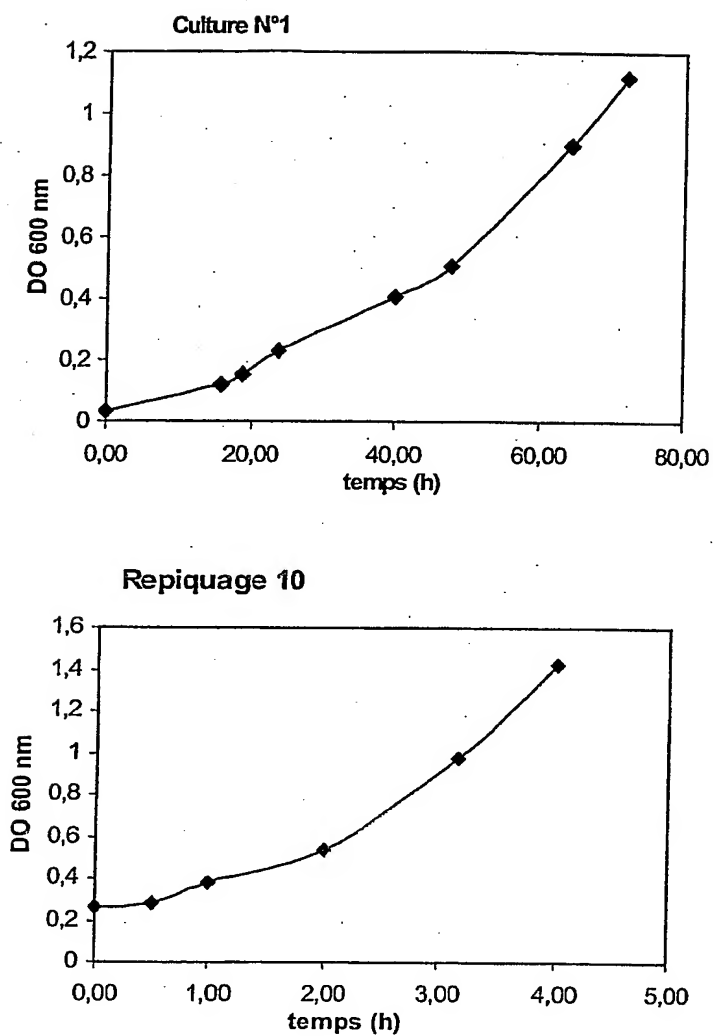
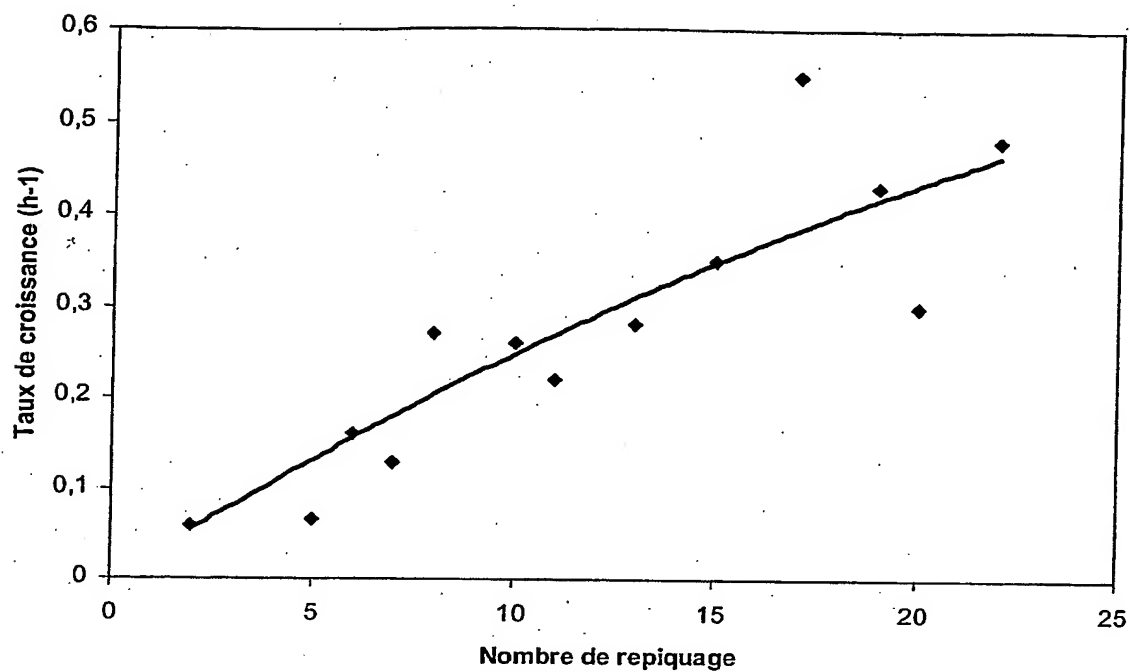


Figure 12

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**Figure 10**

**Figure 13**

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